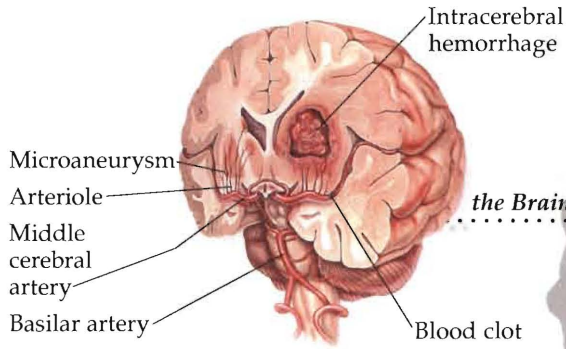


UNDERSTANDING HYPERTENSION, LVH, & STROKE



the Brain

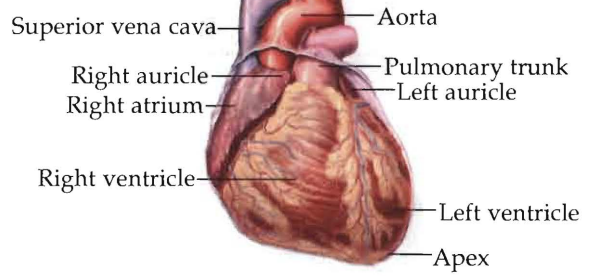
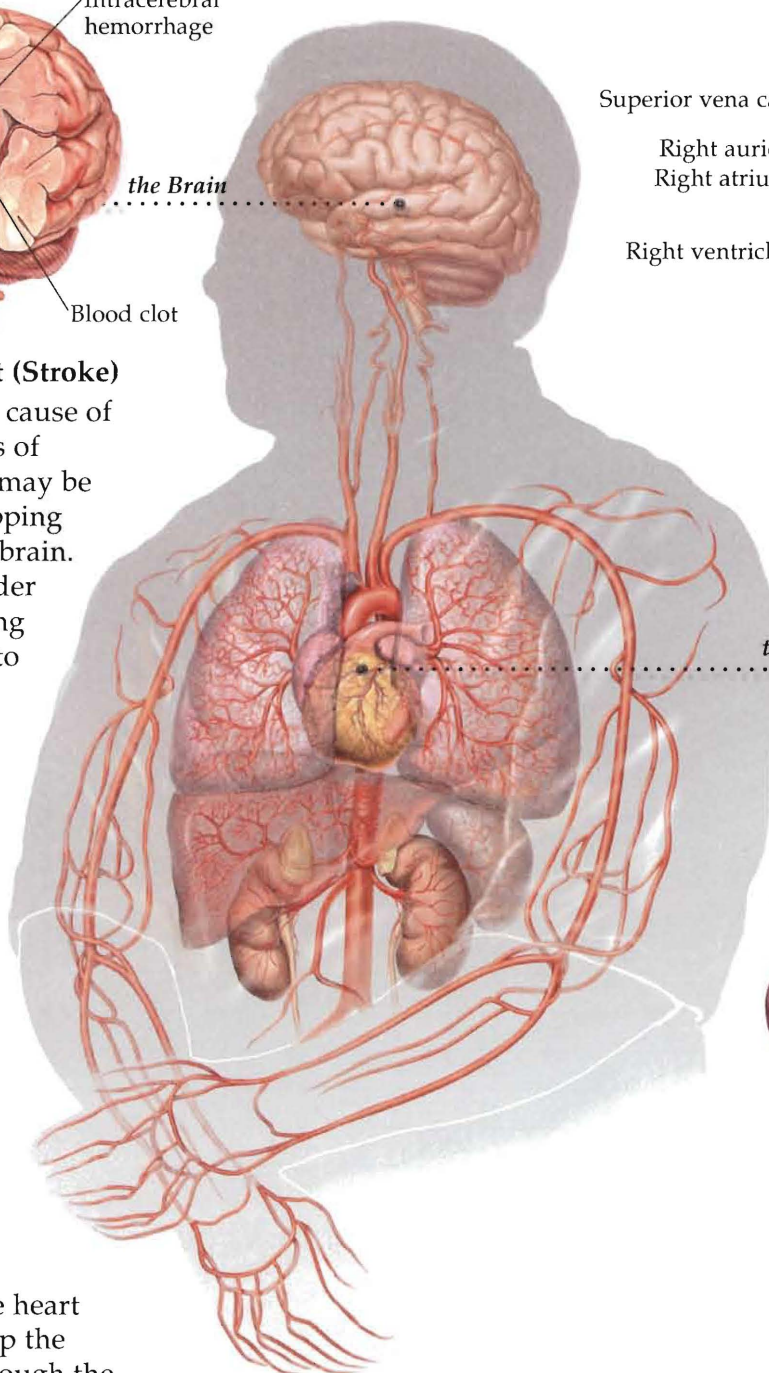
Cerebrovascular Accident (Stroke)

Hypertension is the major cause of stroke. The harmful effects of hypertension in the brain may be caused by blood clots stopping blood flow to parts of the brain. Aneurysms may burst under increasing pressure, causing hemorrhage and damage to brain tissue.

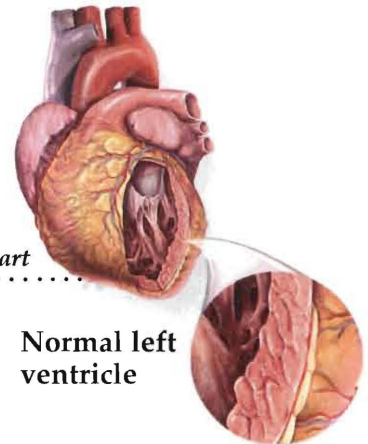


What Is Hypertension?

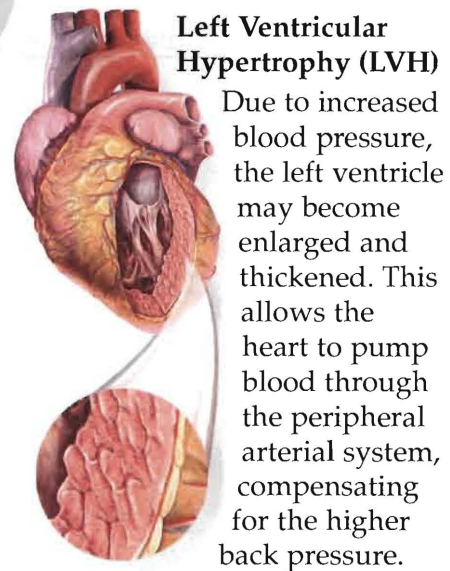
High blood pressure is hypertension. When your blood pressure is high, the heart must work harder to pump the same amount of blood through the arteries. The risk factor of hypertension (high blood pressure) can cause long-term damage to your heart, kidneys, and eyes. High blood pressure is defined as an average blood pressure greater than or equal to 140/90 mmHg (millimeters of mercury). The top number (140), systolic pressure, is the amount of pressure your heart generates when pumping blood out through your arteries. The bottom number (90), diastolic pressure, is the amount of pressure in the arteries when the heart is at rest between beats. Your blood pressure normally varies during the day. It rises during activity, and it decreases with rest.



the Heart



Normal left ventricle



Left Ventricular Hypertrophy (LVH)

Due to increased blood pressure, the left ventricle may become enlarged and thickened. This allows the heart to pump blood through the peripheral arterial system, compensating for the higher back pressure.

High blood pressure is defined as

$$\frac{\text{Systolic mmHg}}{\text{Diastolic mmHg}} = \frac{140 \text{ mmHg}}{90 \text{ mmHg}}$$

or higher

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